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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,802	01/09/2006	Serge Allaire	86403-3	5336
28291 7590 07/31/2007 FETHERSTONHAUGH - SMART & BIGGAR 1000 DE LA GAUCHETIERE WEST SUITE 3300 MONTREAL, QC H3B 4W5 CANADA			EXAMINER WHITE, DWAYNE J	
			ART UNIT 3745	PAPER NUMBER
			MAIL DATE 07/31/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/563,802

Applicant(s)

ALLAIRE, SERGE

Examiner

Dwayne J. White

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3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 17,18,22-32,34,35,37,38,42,43,46-48 and 50-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 52 and 53 is/are allowed.
- 6) ☒ Claim(s) 17,18,22-25,27,29,34,42,45 and 49 is/are rejected.
- 7) ☒ Claim(s) 26,28,30-32,35-38,43,46-48,50 and 51 is/are objected to.
- 8) ☐ Claim(s)

are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

Applicant's amendment filed 27 April 2007 has been fully considered. Claims 17, 18, 22-32, 34, 35 and 37-44 are pending. Upon further consideration of the prior art, the Examiner has determined that further rejections should have been made. The Examiner regrets any inconvenience this may cause. New rejections are made below.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17, 18, 23, 24, 27, 29, 34, 40, 42, 45 and 49 are rejected under 35 U.S.C. 102(b) as being anticipated by Zegers (2,041,103). Zegers discloses a water vehicle including a device in the rear of the vehicle for interacting with a fluid moving relative to said device, said device comprising: a body 1 characterized by an axis of rotation and having a periphery, said body being rotatable about said axis of rotation; a plurality of vanes 2 associated with said body, each one of said plurality of vanes being movable between an extended position relative to said periphery and a retracted position relative to said periphery; and a control mechanism 14 coupled to said plurality of vanes such that a first vane of said plurality of vanes moves from said extended position into said retracted position and a second vane of said plurality of vanes concurrently moves from said retracted position into said extended position via a slot 8 provided in said periphery of said body without increasing a total frontal area of said vehicle. The control

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mechanism is operative to selectively move each one of said plurality of vanes such that each particular vane is in said retracted position when a tangential velocity of said particular vane is directed against a free stream direction of movement of the fluid relative to said device. The Examiner notes that Zegers further discloses that the invention may be used in an aerial and terrestrial vehicle as well (Page 1, lines 5-7). Zegers also discloses a transmission mechanism (page 1, lines 37-42) associate with the body for transmitting energy associated with rotation of the body to a remote device. The Examiner interprets the body of the vehicle to be a "remote device" and the energy generated is transmitted to the device and thus the device moves forward.

Claims 17 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Paciello (EP-1079104-A). Paciello discloses a for interacting with a fluid moving relative to the device comprising: a body 10 characterized by an axis of rotation about axle 11 and having a periphery, the body being rotatable about the axis of rotation (col. 2 lines 55-56); a plurality of vanes 3 associated with the body, each one of the plurality of vanes 3 being movable between an extended position relative to the periphery and a retracted position relative to the periphery (see Figures 1 and 2); and a control mechanism 5 coupled at 6, (see col.2 lines 49-52) to the plurality of vanes (3) for selectively moving each one of the plurality of vanes between the extended position and the retracted position during rotation of the body (10). Each one of the plurality of vanes (3) includes a plurality of telescoping elements (4) such that each particular vane is telescopically movable between the extended position and the retracted position (see col. 3 lines 1-3). Although the preamble of claim 17 recites a "ground vehicle", such is considered intended use because the body of the claim is silent as to a "vehicle" nor does it further limit the "vehicle".

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zegers. Zegers discloses all of the claimed subject matter except for the specific angles at which the vanes are in the extended and retracted positions.

Since applicant has not disclosed that having the vanes extended within a range angles and retracted within a range of angles solves any stated problem or is for any particular purpose above the fact that the vanes would interact more with the fluid flow and it appears that the vanes of Zegers would perform equally well at angles as claimed by applicant, it would have been an obvious matter of design choice to modify the control system of Zegers by utilizing the specific angles as claimed for the purpose of increases the amount of fluid the vanes interact with.

**CONCLUSION**

***Allowable Subject Matter***

Claims 26, 28, 30-32, 35-38, 43, 46-48, 50 and 51 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 52 and 53 are allowed.

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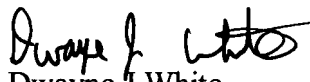
***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne J. White whose telephone number is (571) 272-4825.


The examiner can normally be reached on 7:00 am to 3:30 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
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Patent Examiner  
Art Unit 3745

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7/23/07